



A.D. 1824 N° 5027.

S P E C I F I C A T I O N

OF

JOHN CROSLEY.

VENTILATOR FOR CHIMNEY TOPS.

L O N D O N :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY :

PUBLISHED AT THE QUEEN'S PRINTING OFFICE, EAST HARDING STREET,
NEAR FLEET STREET.

Price 5d.

1855.



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Ventilator for Chimney Tops.

CROSLY'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JOHN CROSLY, of Cottage Lane, City Road, in the County of Middlesex, Gentleman, send greeting.

WHEREAS His most Excellent Majesty King George the Fourth, by His
5 Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Fourth day of November, in the fifth year of His reign, did, for Himself, His heirs and successors, give and grant unto me, John Crosley, my exors, admors, and assigns, His special licence, full power, sole privilege and authority, that I, the said John Crosley, my exors, admors,
10 and assigns, or such others as I, the said John Crosley, my exors, admors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, my Invention of "A CONTRIVANCE FOR BETTER ENSURING THE EGRESS OF SMOKE AND RARIFIED AIR IN CERTAIN SITUATIONS,"
15 within that part of the United Kingdom of Great Britain and Ireland called England, the Dominion of Wales, and Town of Berwick upon Tweed; in which said Letters Patent there is contained a proviso obliging me, the said John Crosley, by an instrument in writing under my hand and seal, particularly to describe and ascertain the nature of my said Invention, and in
20 what manner the same is to be performed, and to cause the same to be inrolled in His Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said recited Letters Patent, as in and by the same, reference being thereunto had, will more fully appear.

Crosley's Improved Ventilator for Chimney Tops.

NOW KNOW YE, that in compliance with the said proviso, I, the said John Crosley, do hereby declare that my said Invention consists of an arrangement in the construction of a ventilator or chimney top for better ensuring the egress of smoke and rarified air in exposed situations, which arrangement I effect in the following manner :—

Upon the top of the flue or chimney or other channel intended for the egress of the smoke or rarified air, I affix a cylindrical rim in a perpendicular position, the diameter of which will be ascertained by the size of the flue, chimney, or other channel to which it is attached, and its height may be about one half of its diameter ; around and to the top of this cylindrical rim is affixed an inverted frustum of a cone, the smaller diameter of which is of course defined by that of the rim to which it is joined, and the diameter of the upper or widest part is about two fifths larger than the lesser diameter, the perpendicular depth about three tenths of the lesser diameter, and the depth of the side about one third of the lesser diameter ; over this is a concave cap or cover whose diameter may be about one third larger than that of the cylindrical rim, and its depth about one fifth of its own diameter, having an aperture in the centre of it about one half of its diameter ; to the outer circumference or border of which cap or cover is attached an inverted frustum of a cone, the lower or smallest diameter of which is just sufficient to admit of its being passed down close over the frustum of a cone already secured to the cylindrical rim ; its perpendicular depth, and the depth of its side being of the same dimensions as those of the first-mentioned frustum. This concave cap or cover, with the inverted frustum of a cone attached to it, may then be passed down over the frustum of a cone fixed to the cylindrical rim, until the bases of the two inverted frustums are brought nearly to the same level ; it is then secured in that position by pillars or stays rivetted or otherwise attached, one end to the cylindrical rim, and the other to the concave cap or cover ; around the aperture in the centre of the cap or cover already mentioned another cylindrical rim is affixed in a perpendicular position, the height of which may be about one fifth of its own diameter ; over this another concave cap or cover, the diameter of which may be about three fourths of the one first mentioned, and its depth about one fourth of its own diameter, is supported by pillars or stays, as before, at such a height as to bring the circumference or border thereof a little below the level of the top of the last-mentioned cylindrical rim. The object of this arrangement is to prevent any gust or gale of wind blowing horizontally across the top of the flue or chimney, and thereby obstructing the egress of the smoke or rarified air. And I do hereby declare that the nature of my said Invention, and the manner in which the same is to be performed, are also particularly described and ascertained in and by

FIG. 1.

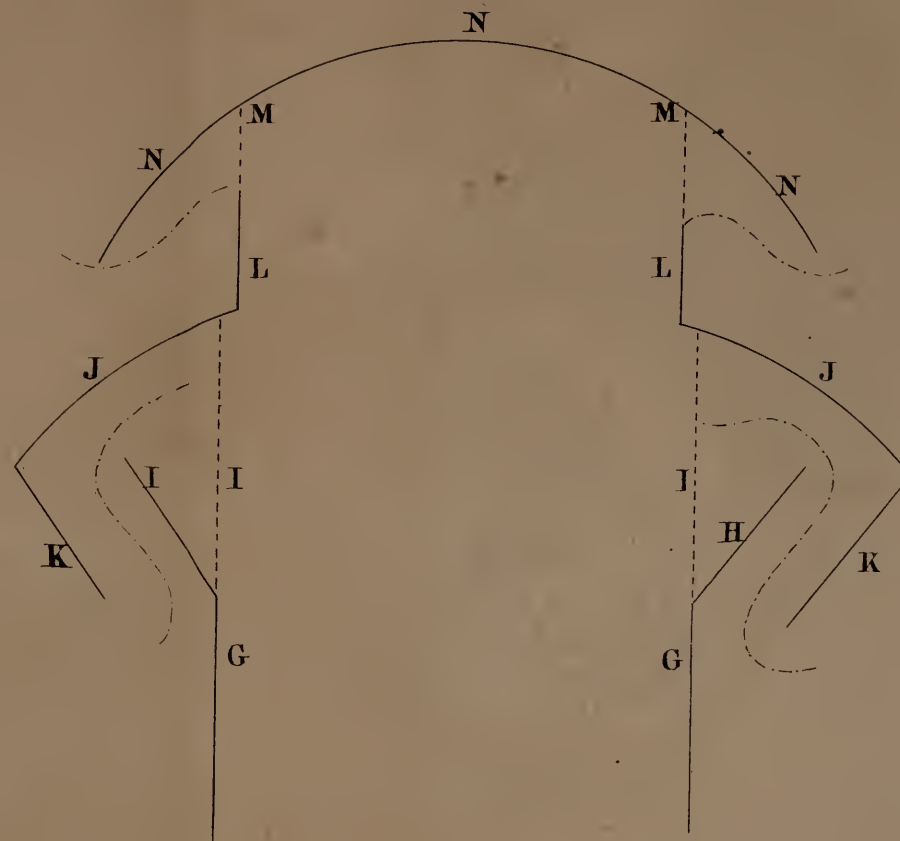


FIG. 2.

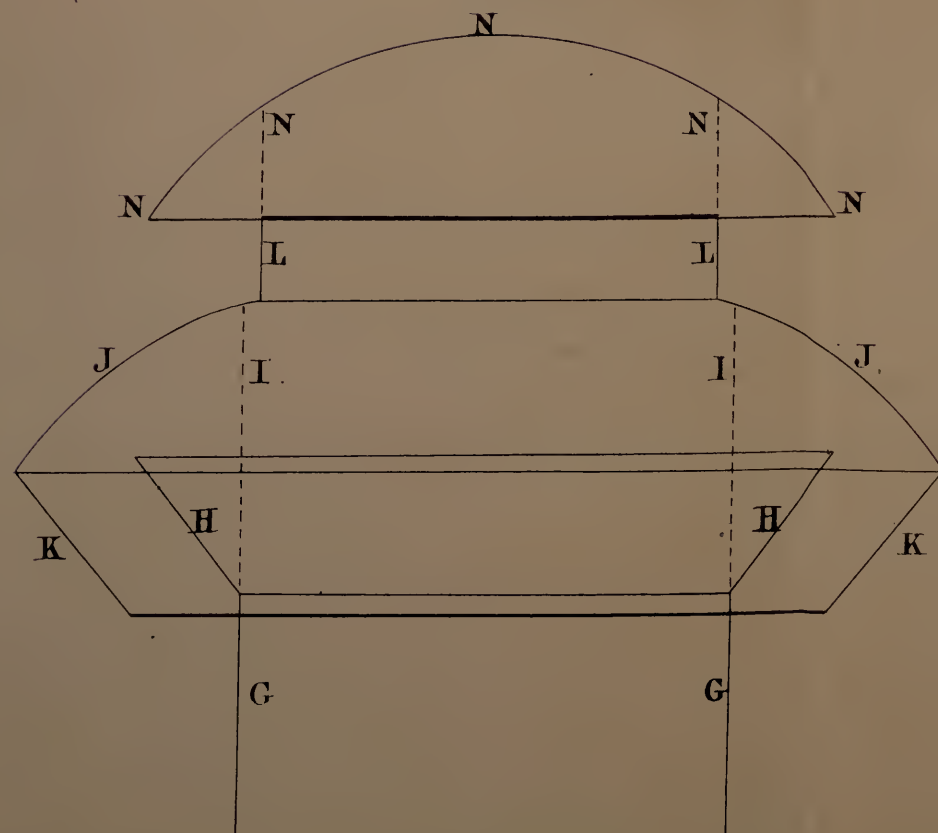
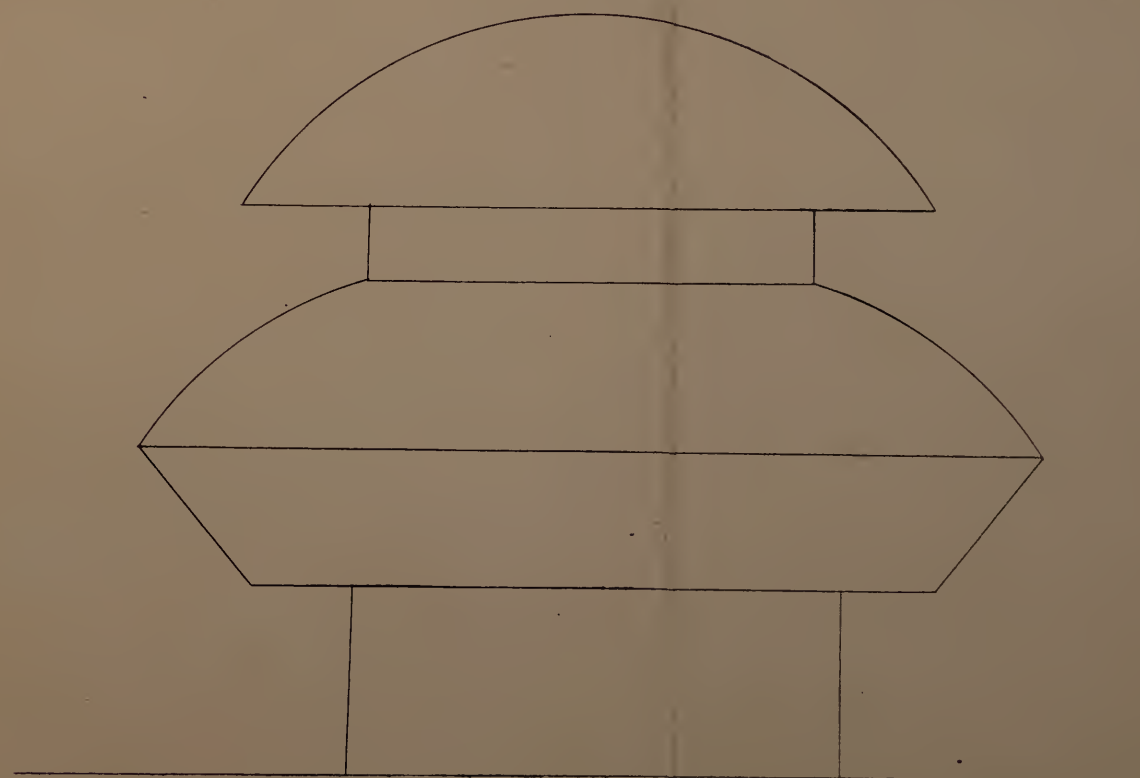


FIG. 3.



The enrolled drawing is partly colored.

Malby & Sons, lith

Crosley's Improved Ventilator for Chimney Tops.

the Drawings hereunto annexed, and the following description thereof (that is to say):—

Upon the top of the flue or chimney, or other channel intended for the egress of the smoke or rarified air, I affix in a perpendicular position a cylindrical rim G, G, described in Figures 1 and 2, the diameter of which will be ascertained by the flue, chimney, or other channel to which it is affixed, and its height may be about one half its diameter; around and to the top of this rim G, G, is affixed an inverted frustum of a cone H, H, the smaller diameter of which is defined by that of the rim G, G, to which it is attached; and the diameter of the upper or widest part is about two fifths larger than the lesser diameter, and its perpendicular depth about three tenths of the lesser diameter, and the depth of the side about one third of such lesser diameter; over this is a concave cap or cover J, J, the diameter of which may be about one third larger than the diameter of the rim G, G, and its depth about one fifth of its own diameter, having an aperture in the centre of it about one half of its diameter. To the outer circumference or border of this cap or cover is attached an inverted frustum of a cone K, K, the lower or smallest diameter of which must be just sufficient to pass over the frustum of a cone H, H, as closely as possible; its perpendicular depth and the depth of its side being of the same dimensions as those of the frustum H, H. This cap or cover J, J, K, K, may then be passed down over the frustum H, H, until the bases of the two inverted frustums H, H, and K, K, are brought nearly to the same level. It is then secured in that position by small pillars or stays I, I, rivitted or otherwise attached, one end to the cylindrical rim G, G, and the other to the cap or cover J, J; around the aperture in the centre of the cap or cover J, J, another cylindrical rim L, L, of the same diameter as the aperture, is affixed in a perpendicular position, the length of which may be about one fifth of its own diameter; over this another concave cap or cover N, N, N, the diameter of which may be about three fourths of the cap or cover J, J, and its depth about one fourth of its own diameter, is supported by pillars or stays M, M, at such a height as to bring the outer circumference or border thereof a little below the level of the top of the rim L, L, so that no gust of wind can pass directly across through the upper part of the flue or chimney, while sufficient space is left open for the egress of the smoke and rarified air. The red dotted lines in Figure 1 are intended to shew the course by which the smoke and rarified air make their escape; and Figure 3 is merely a shaded elevation of the contrivance when complete, and ready to be affixed to the flue or chimney. I do not mean or intend hereby to limit myself to the employment of any particular material or materials in the construction of the several parts described, but to avail myself

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of any materials which are fit and proper for the purpose ; I may also observe that the plan, as described, may be varied by substituting cylindrical, spherical, or other geometrical figures or combinations thereof, such as would naturally be suggested by the above description to persons conversant with the subject, whereby a sufficient protection may be afforded for the egress of the smoke and 5 rarified air.

In witness whereof, I have hereunto set my hand and seal, this Twenty-seventh day of April, in the year of our Lord One thousand eight hundred and twenty-five.

JN^o (L.S.) CROSLEY. 10

Signed, sealed, and delivered by the within-named John Crosley (being first duly stamped) in the presence of

ROB^t WEDDELL, Sol^r,

Berwick upon Tweed. 15

G. MARSHALL, Clerk to Mr Weddell.

WEDDELL, Extra.

AND BE IT REMEMBERED, that on the Twenty-seventh day of April, in the year of our Lord 1825, the aforesaid John Crosley came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form 20 above written. And also the Specification aforesaid was stamped according to the tenor of the Statute made for that purpose.

Inrolled the Thirtieth day of April, in the year of our Lord One thousand eight hundred and twenty-five.

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1855.